preceding chapter. On the other hand, "*d*, Grazing and fodder grass" shows an increase of Rs. 18,678 for the reasons explained in paragraph 87. But "*e*, Other minor produce" shows a decrease of Rs. 5,934, which is due in Northern Kánara (3,001) and Belgaum (Rs. 2,291) to a bad crop of *Shigékái* and other minor products.

EXPENDITURE.

A.—Conservancy and Works.

174. The increase under VI is due to the purchase of cattle and carts in the Central Division of Kánara (Government Resolution No. 5147 of 22nd June 1892). That under "VIII *b*" (Rs. 1,217) is due to acquisition of land for forests in Belgaum and Southern Division of Kánara; and under "VIII *c*" (Rs. 3,073) and *e* (Rs. 3,975) to charges connected with topographical survey in Kolába and to expenditure on fire-protection in the Northern Division of Kánara.

B.—Establishments.

175. Increase under "I, Salaries" is met with chiefly as follows :—Rs. 1,483 under "*b*, Superior officers" and Rs. 2,488 under "*c*, Subordinate forest and depôt establishments." This is ascribable (*a*) to a new Forest Officer having been posted to the Southern Circle as well as to promotions of other officers, and (*b*) to the transfer of establishment of the Karjat and Khálápur Ranges from the Northern to this Circle.

176. The following shows the value calculated at seigniorage rates of the forest produce granted free :—

Division.	1890-91.					1891-92.				
	Timber—Cubic feet.	Bamboos of sorts.	Canes—Head-loads.	Fire-wood—Cubic feet.	Value.	Timber—Cubic feet.	Bamboos of sorts.	Canes—Head-loads.	Fire-wood—Cubic feet.	Value.
		No.			Rs. a. p.		No.			Rs. a. p.
Northern Division of Kánara	18,448	9,460	..	823	3,225 14 11	11,689	5,350	..	1,813	2,820 12 2
Central Division of Kánara	20,658	2,100	10	180	4,283 8 11	29,562	6,150	8	..	5,561 13 11
Southern Division of Kánara	22,910	650	..	..	4,510 2 7	16,238	3,000	.. 11	..	3,771 1 9
Belgaum	2,119	155	..	..	434 15 11	768	..	..	..	184 5 8
Dhárwár	1,145	350	..	..	633 0 0	239	..	..	..	130 6 0
Bijápur	..	..	..	..	..	..	..	..	..	....
Kolába	7,720	..	..	..	670 0 0	16,660	..	..	..	1,324 0 0
Ratnágiri	..	..	..	..	..	..	..	..	..	....
Total ..	73,000	12,705	10	1,005	13,787 10 4	75,156	14,500	19	1,813	13,792 7 6

CHAPTER VI.

GENERAL REMARKS.

TOUR OF INSPECTION.

177. On the 1st April Mr. MacGregor was at Bomanhalli in the Kánara District, where he met Mr. Bell and the officers serving under him in the Working Plan Division.

178. On the 3rd he reached Supa in the Northern Division of Kánara, where in company with the Divisional Officer he met His Excellency the Governor. On the 13th he proceeded to Yellápur, Tátwhál, Sámbráni, Zálali, Kumbhárváda, Sámjoida and Astoli, which last was reached on the 21st May, and next day he went into head-quarters for the rains.

179. On November 15th he left Belgaum for the Bijápur Division, marching *viâ* Márihál, Halki, Panchgaon and Lokápur to Kaládgi. On the 28th he reached Katgeri. He found the reserves of the Bágalkot and Bádámi Tálukas devoid of grass and great scarcity of fodder and water in most parts of the country, but the forests presented their usual appearance at that season and did not seem to be in any way affected by the drought.

180. From Katgeri he went to Bijápur for the inspection of the Divisional Office and there met Mr. Ryan. From Bijápur he returned to Katgeri and marched thence to Manoli in the Parasgad Táluka of the Belgaum Division,

where he arrived on the 14th December. From Manoli he proceeded *viâ* Huli, Saundatti, Betgeri, Bidi and Mantargi, to Hemadgé in the Belgaum District, which he reached on the 24th December. During his tour through the Parasgad forests he noticed that "the number of goats grazed is apparently as great as ever, although the fee charged has been quadrupled (it has been raised from half to two annas). Improvement in the condition of the Parasgad forests is, of course, impossible as long as they are infested by these pests." One individual is reported to have paid as much as Rs. 90 on account of grazing fees on goats and another is said to own 1,500 goats!! It should be recorded that these forests are at present "Protected". The final report regarding their conversion into "Reserved" is before Government. When they become "Reserved" the grazing regulations will come into force and goat grazing can then be controlled.

181. Christmas was spent at Hemadgé and thence he started for Belgaum which was reached on the 8th January.

182. The camp was despatched by goods train to Karjat, which it reached on 17th, and Mr. MacGregor rejoined it there two days later. From Karjat he marched through the Khálápur and Panvel Ranges to Panvel which he reached on the 27th January. Thence he proceeded *viâ* Kalhé and Pen (where he met the Divisional Forest Officer) to Alibág, returning *viâ* Bombay to Belgaum on the 8th February.

183. On the 17th he reached Mugutkhán-Hubli in the Belgaum District and marched thence *viâ* Dhárwár and Hubli to Tadas in the Dhárwár District. From Tadas he went to Kátur, Bhartanhalli, Sirsi, Sonda (where he met the Divisional Forest Officer, Southern Division of Kánara), Bilki, Manchikeri and Yellápur, reaching this last place on the 24th March. At Yellápur he met the Divisional Forest Officer, Kánara Central Division, and remained there until the end of the year.

184. *Working Plans.*—Although signing this report, I did not receive charge of the Circle until after the close of the year to which it refers. The remarks recorded under the heading "Natural Reproduction" seem to me to be of sufficient importance, however, to require special notice. All that I saw during the short tour I was able to make before the rains commenced and all I have heard, point to the conclusion that under the present system teak reproduction is not assured. Under "Artificial Reproduction" certain measures to compensate for this failure are recorded, but on the large scale on which exploitation is carried on in Kánara any such quasi-horticultural makeshifts can never be sufficient. Under the thickest cover teak will germinate; but I think sufficient is recorded from the reports of Divisional Officers under "Natural Reproduction" to warrant, irrespective of theory, the belief that the present system of unregulated *jardinage* is answerable to a considerable extent for the failure of teak reproduction, for the cover is not sufficiently broken to allow the germinated seedlings to live and grow. Again, Mr. MacGregor records that the *data* collected by the Working Plans Branch have encouraged him to extend working and increase the annual outturn. But with even a thorough knowledge of the jungles it must always be a guess to what extent *data* collected in one forest are of universal application. For these reasons one of the most urgent, if not the most urgent, question in connection with forest administration in the Southern Circle is that of Working Plans. It is to be regretted, therefore, that owing to a paucity of trained officers the two Working Plan Parties during the past year have been working under one officer, consequently the collection of the more important data, which work can only be entrusted to a trained officer, has not made the progress it should. It is to be hoped that in the coming season it will be possible to spare another trained officer of experience, so that this most important work of preparing Working Plans may be pushed on vigorously to completion.

185. *Forest Settlement.*—Another branch of work vitally connected with the above has also made less progress than could be wished. I allude to forest settlement. This poor result is also due to the paucity of officers available, for though a second Settlement Officer for Kánara was asked for, Government was

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